

REMARKS

This is in response to the Office Action dated April 19, 2006. Claims 14, 16 and 21-24 have been canceled. New claims 25-26 have been added. Thus, claims 1-13, 15, 17-20 and 25-26 are now pending.

Applicant notes with appreciation the Examiner's withdrawal of the final rejection in view of the Appeal Brief filed February 8, 2006.

Claim 1 - Art Rejection Based on Ohsaki

Claim 1 stands rejected under Section 102(b) as being allegedly anticipated by Ohsaki. This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires a "coated article having blue glass side reflective color, the coated article comprising . . . a layer comprising tin oxide provided on and contacting a surface of the glass substrate; a layer comprising silicon nitride provided on and contacting the layer comprising tin oxide; an infrared (IR) reflecting layer located on the substrate over the layer comprising tin oxide and over the layer comprising silicon nitride, wherein the IR reflecting layer comprises one or more of NiCr, Cr, Nb, and NbZr, and wherein the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au . . . wherein a combined thickness of the layer comprising tin oxide and the layer comprising silicon nitride is from 700 to 900 Å wherein the coated article has blue glass side reflective color." For example and without limitation, Table 1 on page 7 and paragraph [0023] explain how this combined thickness range for the layers comprising tin oxide and silicon nitride unexpectedly allows for blue glass side reflective color to be achieved.

Ohsaki fails to disclose or suggest the aforesaid underlined features of claim 1. In Example 2 of Ohsaki relied on by the Office Action, the silicon nitride is from 20-30 Å thick

(see Table 2 in col. 6 of Ohsaki) so that the combined thickness of the tin oxide and silicon nitride is from 340-350 Å – much less than the range required by claim 1. Thus, it will be appreciated that Ohsaki fails to disclose or suggest the combined thickness range of from 700 to 900 Å as required by claim 1, and instead teaches directly away from the invention of claim 1.

Claim 1 - Art Rejection Based on Lingle '662 and Lingle '585

Claim 1 as amended also defines over Lingle '662 in view of Lingle '585, for at least the following reasons.

There is nothing in the cited art that would indicate that modifying Lingle '662 as alleged by the Office Action (which would never even be done for the reasons discussed above) would result in a *blue* glass side reflective color. The cited art simply fails to disclose or suggest this. Replacement of the Ag layers in Lingle '662 with NiCr layers as alleged in the Office Action (which one would never do as explained below) would drastically change the color of the coated article such that it likely would not have “blue” glass side reflective color as required by claim 1. Moreover, it is well established that a claim feature is “inherent” in a reference only if that feature is “necessarily” present in the reference, “not merely probably or possibly present.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002). Here, the blue color is neither mentioned nor inherent in the alleged modified product alleged by the Office Action. Instead, the use of two NiCr, Ni or Cr layers would tend to make the product very dark so that it could not even be used as a window, and such a product would not have “blue” glass side reflective color as required by claim 1.

The claimed thickness range of claim 1 also is not disclosed or suggested by the cited art. In particular, Lingle '662 never states what thickness layer 3 would be if it were to comprise tin oxide. Table 1 in Lingle '662 merely states what the thickness of titanium oxide would be for

layer 3; no thickness is every discussed as to tin oxide for layer 3. Thus, there can be no *prima facie* case of obviousness in this respect.

Still further, Lingle '662 discloses a double-silver low-E coating, where the IR reflecting is performed by first and second *silver* based layers. There is no disclosure or mention in Lingle '662 of an IR reflecting layer comprising one or more of NiCr, Cr, Nb, and/or NbZr as required by claim 1. Instead, Lingle '662 teaches directly away from the invention of claim 1 because Lingle '662 discloses two silver layers for IR reflecting layers – which is expressly excluded by claim 1. In particular, claim 1 expressly excludes the low-E coating of Lingle '662 because claim 1 states that the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au. One of ordinary skill in the art would never have modified Lingle '662 as alleged in the Office Action. Lingle '662 expressly states in the Abstract that he desires a visible transmission of at least 70%, and one of ordinary skill in the art would not have modified Lingle '662 in a manner which would prevent this.

In particular, the Office Action contends that it would have been obvious to have replaced Lingle '662's silver (Ag) IR reflecting layers with the Ni or NiCr of Lingle '585 for example. However, one of ordinary skill in the art would never have done this. Specifically, Lingle '662 relates to a low-E coating designed for high visible transmittance (at least 70 or 75% transmittance as taught in the abstract) so as to be useful for its intended vehicle windshield applications. One of ordinary skill in the art would never have replaced the Ag layers of Lingle '662 with the Ni or NiCr of Lingle '585 because this would significantly degrade the transmittance of the coated article, such that the product could no longer be used for its desired windshield purpose or any other suitable purpose. In particular, such a modification (replacing both Ag layers with Ni or NiCr) would result in a coated article having a transmittance well

below 50%, and probably below 10%, so that the product could not practically be used as a vehicle windshield or any other suitable application – and certainly could not have blue color, thereby destroying the functionality and an intended purpose of Lingle ‘662. Lingle ‘662 expressly states in the Abstract that he desires a visible transmission of at least 70%, and one of ordinary skill in the art would not have modified Lingle ‘662 in a manner which would have prevented this from occurring.

It will be appreciated by those of skill in the art that replacing two silver layers in a coating with two like NiCr/Ni layers would cause the visible transmission to severely drop and the color to shift dramatically so that the color would be extremely dark. NiCr is much more absorbing than is silver (i.e., much less transparent). This is why those of skill in the art would never have used two IR blocking NiCr or Ni layers in the same coating of Lingle ‘662. There is simply no teaching in the art of record of using two Ni or NiCr IR reflecting layers in the same coating as the Office Action suggests to do. One of ordinary skill in the art would never have done this because this would cause the visible transmission to be so low that the coated article, from a practical point of view, could not be used for Lingle 662’s desired applications – also, even if this were done the blue color of claim 1 would not have resulted. The Section 103(a) rejection is fundamentally flawed.

Other Claims

Claim 15 requires “a combined thickness of the layer comprising tin oxide and the layer comprising silicon nitride is from 700 to 900 Å wherein the coated article has blue glass side reflective color.” The cited art fails to disclose or suggest this feature of claim 15.

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Claim 25 requires "a combined thickness of the layer comprising tin oxide and the layer comprising silicon nitride is from 1,000 to 1,400 Å wherein the coated article has green glass side reflective color." Again, the cited art fails to disclose or suggest this feature of claim 25.

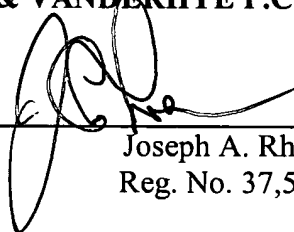
Conclusion

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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